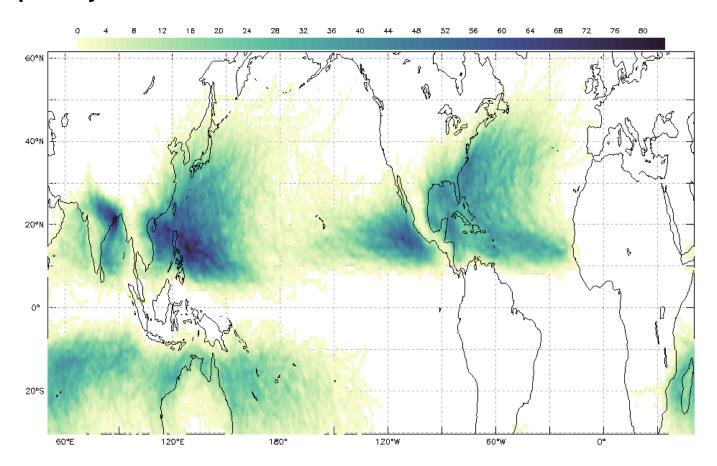
### My NASA Data - Mini Lesson

# **Tropical Cyclone Counts Model**



### Mini Lesson

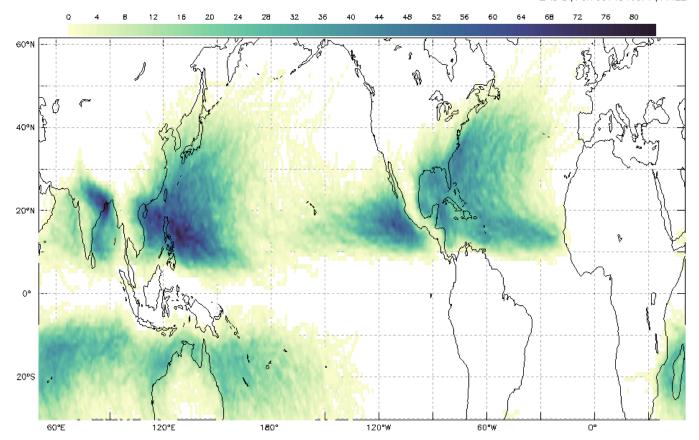
**Tropical cyclones** are sometimes called *hurricanes or typhoons*. The image below is a model of the frequency of tropical cyclones around the world from 1842 – 2018. It was generated in the My NASA Data <u>Earth System Data Explorer</u>.

Maps are models of Earth and, when paired with data, they can be useful visualizations of how variables may change over space. In this mini lesson, you will use the Data Literacy Map Cube to familiarize yourself with and interpret the tropical cyclone frequency model.

DATASET: Tropical Cyclones

VARIABLE: Number of Tropical Cyclones (1842 - 2018) (dimensionless (count))

LAS 8./Ferret 7.5 NOAA/PMEL



### **Materials Required**

Tropical Cyclone Counts Map Image

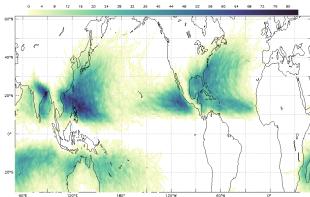


- Map Cube
  - See <u>link</u> for the My NASA Data Cube template to make your own -or- consider one of the following alternatives below:
    - A gaming die can be used in place of the template.
    - Virtual Alternative: Consider using an online Dice Roller for six-sided cube (See this <u>link</u> for a possible resource.)
- Map Cube Questions for Students
  - There are four question sheets (<u>link</u>) to choose from: A (Beginner), B (Intermediate), C (Advanced), D (ELL).
    - Select one or use the sheet your teacher instructs you to use. If using paper version of the Map Cube Questions, you will also need one sheet of paper and

a pencil or pen.

Virtual Alternative: Select the Map Cube Google Form that your teacher has instructed you to use. (Teachers: see this <u>guide</u> for instructions on how to upload Google Forms to your Online Classroom.)

#### **Directions**



p Image

- 1. Have the Tropical Cyclone Counts Ma and the Map Cube Question Sheet (or Google Form) available.
- 2. First, roll a die or cube and find the matching question/number on the Map Cube Question Sheet for the number you roll. (They are numbered for easy matching.)
- 3. Notice that there are lettered questions (A,B,C, etc.) under each of the main numbered questions (seen in **bold).** 
  - Choose ONE lettered question to answer per roll.
  - On a separate sheet of paper (or on the Google Form), document your answer to the *number* and *letter* of the question you have selected.
- 4. Repeat Steps 2-3 until you have answered at least six *different* questions. NOTE: Question 5.B does not relate to this particular map. You may skip this sub-question and roll again if necessary.

Teachers who are interested in receiving the answer key, please contact MND from your school email address at <a href="mailto:larc-mynasadata@mail.nasa.gov">larc-mynasadata@mail.nasa.gov</a>.

## **Earth System Data Explorer**

Number of Tropical Cyclones (1842-2018)